DOCUMENT RESUME

ED 367 356 IR 054 904

AUTHOR Qureshi, Azra
TITLE Continuing Education of Health Sciences Librarians: A National Survey.
PUB DATE Dec 90
NOTE 39p.; M.L.S. Research Paper, Kent State University.
PUB TYPE Dissertations/Theses - Masters Theses (042) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Academic Libraries; *Continuing Education; *Librarians; *Library Education; Library Surveys; *Medical Libraries; National Surveys; Postsecondary Education; *Professional Development; Questionnaires; Training Methods

ABSTRACT

This study examines continuing education and professional development of 210 health sciences librarians affiliated with 70 academic medical libraries in the United States, which has the most advanced system of education in librarianship in the world. Of the 102 respondents, the largest categories were library directors/administrators and public services librarians, of whom 56% possess the MLS (Master of Library Science) degree with formal courses in health sciences librarianship. Even though they are employed in a scientific field, 42% have a humanities undergraduate background; about 50% have a pure science or applied science background. Among difficulties described are learning the nomenclature of the field and a lack of subject background knowledge. An overwhelming majority (90%) indicate they acquired their specialized skills on the job. The most popular means of staff development is through personal coaching or training by other library personnel. Findings reveal that the Medical Library Association (MLA) and the National Library of Medicine's (NLM) continuing education courses are focused efforts in bettering health sciences librarianship in the United States. It is also indicated that the traditional master's degree is not perceived by librarians as adequate to prepare health sciences librarians for survival in the health information environment. Survey instrument and cover letter are appended. (Contains 51 references.) (Author/TMK)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED 367 356

CONTINUING EDUCATION OF HEALTH SCIENCES LIBRARIANS
A NATIONAL SURVEY

A Master's Research Paper Submitted to the
Kent State University School of Library Science
in Partial Fulfillment of the Requirements
for the degree Master of Library Science

by

AZRA QURESHI

December, 1990

12054904

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Rosemary Du Mont

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ABSTRACT

Due to the importance of library service to health care professionals throughout the world, the education and training of library personnel to manage the nations' biomedical information resources is of widespread concern. This study examines continuing education and professional development of 210 health sciences librarians affiliated with 70 academic medical libraries in the United States which has the most advanced system of education in librarianship.

Of the 102 respondents, the largest categories are library directors/administrators and public services librarians, of which 56% possess the MLS degree with formal courses in health sciences librarianship. Even though they are employed in a scientific field 42% have a humanities undergraduate background; about 50% have a pure science or applied science background. Among difficulties described are learning the nomenclature of the field and a lack of subject background knowledge. An overwhelming majority (90%) indicate they acquired their specialized skills on the job. The most popular means of staff development is through personal coaching or training by other library personnel. Findings reveal that the MLA and NLM's CE courses are major focused efforts in bettering health sciences librarianship in the U.S. It is also indicated in this paper that the traditional master's degree is not perceived by librarians as adequate to prepare health sciences librarians for survival in the health information environment.

Master's Research Paper by

Azra Qureshi

B.A., M.A., Karachi University, Pakistan, 1973

M.L.S. Kent State University, 1990

Approved by

Advisor Lois Buttlar Date 12-7-90

TABLE OF CONTENTS

CHAPTER

I. Introduction 1
Purpose 2
Definition of Terms 3
Limitations of the Study 4

II. Review of Literature 5

III. Methodology and Procedure 12

IV. Results 13

V. Discussion 20

References 23

Selected Bibliography 25

. . . . . .

Appendix A 28
Questionnaire

Appendix B 31
Cover Letter

LIST OF TABLES

Table 1. Position of Librarians Responding to Questionnaires 13

Table 2. Undergraduate Background of Health Sciences Librarians 14

Table 3. Means of Staff Development and In-service Training 18

ACKNOWLEDGEMENT

I acknowledge with profound gratitude the guidance and encouragement of Dean DuMont from whom I derived determination to complete my M.L.S. I am also indebted to Dr. Buttler for her helpful comments and suggestions during the writing and revision of this paper. I wish to thank all my teachers and secretaries of Library School for their kind support. I could never forget Julie Gedeon's cheerful greetings and concerns for me which made my days at Kent.

CHAPTER I

INTRODUCTION

The history of education for medical librarianship has been comprehensively covered in the library literature of the last fifty years. Relevant references are found to authors such as Doe (1), Brodman (2), Postell (3), and Hill (4), for a detailed account and also to Shirley's (5) annotated bibliography on education of medical librarianship. However, developments of the last twenty years are of more interest in order to keep up with the times.

Education for medical librarians in the U.S. began in an unstructured, learning on-the-job experience, by apprenticeship methods in those libraries large enough to have more than one staff member, and by trial-and-error in the smaller libraries. Medical library personnel at first were recruited more from the ranks of those associated with the medical profession than from those coming from librarianship.

Formal education for medical library specialization was initiated about fifty years ago despite the fact that medical libraries received special treatment for many years before that time. The philosophy of specialized education was developed as early as 1925, and this theory was finally put into practice beginning with the medical reference and bibliography course given at Columbia in 1939. (6) In the late 1940s the requisites for medical librarians were

formalized into a certification code by the Medical Library Association, and since that time specialized education for medical librarians has grown stronger using this code as a guideline. This education consists basically of two types - formal library school courses and internship programs which offer a learning-while-working situation.

Purpose

It is the objective of this study to examine other types of education - how medical librarians acquire in-service training and available staff development programs on the job. The kind of educational background they had when entering the medical libraries and how they learned the specialized skills to perform their job effectively and efficiently are questions to be answered by this study. Since the purpose of the study is also to use the findings in suggesting a model for a developing country like Pakistan, it will also explore any special education/training opportunities available to assist the developing world's health sciences librarians in American medical school libraries. The World Health Organization is more than willing, through its regional centers, to help the developing world's medical librarians with their training needs. But the demand has to come from individual countries. The information gathered for this study will serve a useful purpose in that direction.

Definition of Terms

Medical Library : A library serving the information needs of students, practitioners, and researchers in one or more of the health sciences, such as medicine, dentistry, nursing, and pharmacy. It may be maintained and supported by a university, a specialized institution of post-secondary education providing instruction in one or more of the health sciences, a hospital, a pharmaceutical firm engaged in research, or a unit of the local, state, or federal government. Synonymous with health sciences library.(7)

Continuing Education : CE is defined here as the process by which medical library personnel (alone, in group, or in institutional settings) purposefully seek to improve themselves or their profession by changing their knowledge, attitudes, or skills. CE can be carried out in a variety of ways - reading journals and books, listening to cassette tapes or tele-lecture programs, attending meetings or conferences or journal clubs, discussing problems with colleagues, and attending more formally structured classes.

Internship : An internship in a library defined by Brodman (8) is a period of supervised experience specifically designed to give the trained but inexperienced librarian a well rounded working view of the field. It reaches this goal by varied assignments throughout the library, by formal and informal discussion of the specific tasks, the reasons for

the work, the methods chosen, and the ends sought, as well as by comparing these methods and ends with others, and by providing for the study of the fundamental component of the library, and its literature.

Work-Study Program : Work-Study has been defined by Martin (9) as a balanced program, which brings financial, personnel, and educational considerations into a working relationship. Further, it is a cooperative program between libraries and a library school, that takes into account the interests of both institutions.

Limitations of the Study

This study is limited to training opportunities available to health sciences librarians in health sciences libraries and teaching hospital libraries. It does not include special courses, seminars, workshops or internships available at schools of Library and Information Science.

CHAPTER II

LITERATURE REVIEW

John Harvey and F.L.Carroll (10) in their book Internationalizing Libray and Information Science Education have proposed a possible model for offering continuing library education activities on an international basis. The chapter on continuing education shows how international CE programs in library schools could be planned and mounted. Associations, government agencies, and individual libraries have been urged to share in this effort. Superimposed on this program is the individual librarian's responsibility to meet the requirements of lifelong learning for both occupational competence and personal growth.

Brennen and Sullivan (11) in their paper have presented an overview of international training programs for foreign librarians in the United States, focusing on programs for health sciences librarians in the United States medical school libraries. Information is given on the availibility and types of institutionally sponsored programs, as well as on MLA's Cunningham Fellowship Program. Some of the difficulties and the benefits of such prcgrams are discussed. Job exchanges and training programs offer librarians in the United States the opportunity to become acquainted with their counterparts in other countries. Such programs enable librarians of various countries to become aware of one another's special needs and common problems, and allow them

to share ideas and expertise.

Detlefsen (12) has offered an analysis of some predictions for the fields of library education and medical librarian-ship. The recent past of education for medical/ health sciences librarianship is outlined, with emphasis on the changing nature of the library school, its faculty, and its students. The present situation is described - where responsibility of continuing education has been handed to the MLA by library educators. The MLA organizes and markets its own continuing education courses with the apparent willingness of many library schools to let the MLA do it without competition. It basically proposes the future agenda due to social pressures for change in education, identifying the need for interdisciplinary and cooperative efforts in medical informatics, high technology, a variety of health professions, and contemporary library practice.

Mayfield (13) in his introduction has also emphasized the need for quality in education. On the whole, he has assessed that education is mismatched to the changing character of environment. The issues are particularly complex for health sciences librarians. The roles of information professionals have shifted, involving not only information processing but biomedical subject knowledge, consumer service, and education. New technologies have been reshaping the workplace and the competencies required for professional practice.

Schwarz and Hefner (14) have challenged the librarians and information system to keep pace with enormous changes in patient care and medical education, as well as with expansions in biomedical research and technology. The responsibilities of medical librarians have increased. The librarian's traditional role as intermediary between clientele and collection has expanded to include more data synthesis and interpretation. Demands are imposed upon the librarian by physicians, administrators, sociologists, marketing analysts, attorneys, and the entire spectrum of individuals involved in the health care system. This group included patients, who have been demanding more educational information on conditions and treatments. Modern library managers have to be more sensitive to new forces in the medical library environment and have to organize effective library programs for staff development and continuing education.

Lathrop (15) stated that interest in professional development is high among hospital librarians. The Hospital Library Section (HLS) of MLA conducted a survey of its members to determine their continuing education needs and preferences. A questionnaire mailed with the HLS Newsletter gathered information in four general areas: 1) preferred modes of continuing education, 2) subjects viewed as most important, 3) motivators and deterrents, and 4) topics for presentation at the 1985 MLA annual meeting. Of the 560

questionnaires mailed, 257 (46%) were returned. Overall, for continuing education, members favored one-day courses dealing with automated systems, planning and marketing; for annual meeting topics, they were additionally interested in health care finance.

Schmidt and Swanton (16) in their content analysis of health sciences library positions available in 1977-78, as advertised in the MLA News, presented the professional requirements sought by employers of applicants. Data for 414 advertised positions were coded and are displayed in nine tables. Variables selected from the range of positions advertised include: type of position, years of experience, subject background, Medical Library Association Certification, and online experience. Geographic distribution of jobs is also given.

Stroyan (17) analyzed two hundred ninety-four job advertisments that appeared in MLA News in 1986 to determine whether MLA certification had become a more frequent requirement than it was at the time of Schmidt and Swanton's above study in 1980. Other qualifications studied were subject background, health sciences library courses, online searching experience, and OCLC experience. Library experience, educational requirements, and geographic distribution were also included.

Rees, Rothenberg and Denison (18) have presented the education system for medical library practice in the U.S. and

four major components to it which include: graduate degree programs in library science with specialization in medical librarianship; graduate degree programs with no such specialization; postgraduate internships in medical libraries; continuing education programs. Data are presented illustrating the flow of graduates along these several pathways.

Royaltey (19) has examined the health information needs of health care professionals and consumers in less-developed countries. Although somewhat similar to those of their U.S. counterparts, they have a number of unique differences. Health care professionals in developing countries are more diverse in their backgrounds, training, experience, and work settings. These differences, combined with cultural variables, a lack of resources and trained information professionals or librarians, contribute to the complexity of health information delivery. Due to the higher rate of commercial health information and the absence of good libraries and trained manpower in them, the process of health-related decisions of the health care professionals is affected.

Alan Rees (20) in his paper presented at the Joint Conference of Australian and New Zealand Health and Medical Librarians has talked about preparing for new library roles in the electronic information environment. Whether a developed or developing country, he warned that if the

library profession does not furnish the requisite manpower, other professionals will emerge with the necessary managerial, computer, systems, educational, technological, and content skills. He has suggested a strategy of survival for health sciences librarians.

The leadership and coordination provided by the World Health Organization is portrayed by Baryl Ruff (21), retired director of WHO's Office of Library and Health Literature Services. Faced with unlimited needs and limited resources HLSP is involved in surveys, training, regional medical libraries, national and regional networks, bibliographic services, and document delivery, promotion, coordination, and communication. WHO activities reflect a shift from internationally-conceived technical projects to broad programs based on national planning and initiatives. Recent planning and implementation of HLSP activities are described.

Ursula Poland (22) gave an overview of the Medical Library Association's past international activities with emphasis on the international fellowship program, international exchange of materials, participation in the International Federation of Library Associations, and international congresses on medical librarianship. Continuation of the association's current international activities is endorsed, especially the extension of bilateral agreements with health sciences library associations of other countries, and increased activity in comparative medical

librarianship - which definitely provides librarians continuing education opportunities, professional development and growth.

CHAPTER III

METHODOLOGY AND PROCEDURE

This exploratory research was conducted in the form of a national survey of professional development and in-service training of the health sciences librarians serving in either medical school libraries or teaching hospital libraries. A questionnaire was designed and mailed to 70 medical library directors out of a population of 217, randomly selected. Names and addresses were obtained from the current AMERICAN LIBRARY DIRECTORY. Return addressed stamped envelopes were included for the convenience of respondents.

Each library director was mailed three questionnaires in order to get them filled by his/her two other professional staff members besides him/herself (see appendix A). A cover-letter explaining the need for the study, planned use of the information gained and requesting help of the library director was included with each questionnaire (see appendix B).

A period of five weeks was allowed for the return of the questionnaires. Those who did not respond after the initial five weeks period had lapsed, were contacted by phone to follow up.

Data gathered was analyzed by use of descriptive statistics, namely frequency distributions.

CHAPTER IV

RESULTS

A total of two hundred and ten (210) questionnaires was distributed to seventy (70) institutions. Ninety six (96) responses were received by mail; a randomly selected telephone follow-up elicited more for a total response of one hundred and two which is 48.6 percent. Forty two different institutions reponded for a reponse rate of 60 percent.

The majority of librarians responding to the questionnaires are library directors or admintrators (see Table 1).

Table 1. Position of Librarians Responding to Questionnaires

Position	f	%
Directors/Administrators	36	35.3
Public Services Personnel	41	40.2
Technical Services Personnel	17	16.7
Other	8	7.8
	102	100.00

The total number of patrons served by the health sciences libraries queried ranges from 550 to 26,000. The mean number of clients served comes to 5,380.

Educational Background

Most of the library personnel responding (55.8 percent) indicate that they possess the MLS degree and in addition have taken formal courses in health sciences librarianship. Another 39 (38.2%) also possess the MLS, but have not taken any formal course work in medical librarianship. Two have Ph.D. degrees and four began their library career as paraprofessionals and acquired their MLS on the way at a later stage. One of them did that almost twenty years later.

Subject background of these health sciences librarians at the undergraduate level varies, but the largest clusters of librarians come from humanities and social sciences, or basic sciences background (see Table 2).

Table 2. Undergraduate Background of Health Sciences Librarians

Subject	f	%
Humanities	43	42.3
English	18	
History	19	
Languages & Linguistics	6	
Social Sciences	22	21.5
Applied Science	8	7.8
Pure Science	29	28.4
Biology	14	
chemistry	6	
Mathematics	1	
Physics	4	
Plant genetics	2	
Zoology	2	
	102	100.00
	14	

Difficult Areas of Work

Responses to the question that elicited information about areas of the job that were difficult can be categorized into four major areas; 1) personnel management and staff supervision; 2) technological change; 3) finances; 4) interpersonal relations.

The first area includes problems of dealing with staff to smooth over conflicts, preparing and training people to accept changes in work environment, dealing with bureaucracy relating to budget allocation, purchasing or personnel requirements. The second most difficult area to most of the respondents seems to be technological changes and keeping pace with them, making their staff adapt to that change and not feeling outdated themselves. The third most difficult issue, especially for directors and administrators is getting budget administration and setting priorities right money-wise. The fourth indicated issue of concern where difficulty is encountered is interpersonal skills and communication whether it is with patrons in the technique of reference interview or it is communiation upward with superior staff or downward with subordinates.

Some other difficulties indicated in several questionnaires seems to be getting accustomed to the nomenclature of medicine and grasping medical terminology; yet others indicate this as attributable to a lack of subject knowledge as their background knowledge was in totally

different area such as humanities or social sciences.

Fifty seven medical librarians (55.8%) feel that the problems outlined above can not be attributed to deficiencies in their formal library education courses. Only thirty one (30.3%) fault their library education program; they think it consists of too much theory and very little to prepare for a real practical work life situation; while five (4.9%) think it is the combination of both. "Not everything can be taught in the class room," they comment, but there should be some effort to change teaching methodology and designing of courses which put more emphasis on practical training and prepare the graduates to meet the employers' needs.

On the Job Training

An overwhelming majority of health sciences librarians (90%) indicate that they acquired their specialized skills on the job. The next most important (67%) and popular way of gaining expertise is by means of courses offered by Medical Library Association (MLA), which provides certification to practice as a health sciences librarian. Twenty eight respondents (27%) indicate they learned required skills through National Library of Medicine's sposored training programs. And twenty seven (26.4%) developed skills through further formal courses in health sciences librarianship.

Staff Development

With respect to staff development and in-service training ninety-four indicate that they provide an orientation program for new staff members. Of these, seventy four say they have formal training programs while twenty indicate that they are of an informal nature. Eleven (10.7%) do not have any provision of this nature.

The majority of these libraries do not have a work training program available for foreign librarians; sixty seven libraries (65.6%) responded in the negative to this question and explain budget, staff or time constraints prevent such programs. Nineteen respondents indicate that their libraries have hosted visitors, Cunningham fellows (MLA fellowship awardees), and have provided training and hands-on experience to foreign librarians at one time or another. They find it mutually beneficial. These nineteen respondents belong to only eight libraries. Twelve respondents state that they have these programs on an informal level depending upon the availibility of time, staff and individual visitor's interest. "Whether what is offered in the U.S. can be related easily to local conditions of a developing country and how useful it is can be determined by the foreign visiting librarians," commented one respondent. A few respondents have suggested the reverse. An expert going to a developing country for some time allows more people to be trained at a time. A combination of both could be desirable, because

librarians of developing countries need an exposure to the environment itself as much to see how things are done in a different country as the skills to perform certain tasks.

The most popular means of staff development is personal coaching or training by the library personnel in various libraries. Hands-on practice is ranked as second in importance (see Table 3).

Table 3. Means of Staff Development and In-service Training

Method	f
Library personnel	67
Self Instruction	29
Workshops	23
Hands-on Practice	56

Searching the MEDLINE database, which is the major source of biomedical information for health practitioners, is the area in which most of the training is done in health sciences libraries. Fifty seven respondents (55.8%) indicate that their libraries provide this training. The second most common area of hands-on training is learning to use MESH (Medical Subject Headings) or NLM's indexers' vocabulary on which depends the skill of Medline searching.

Most of the libraries provide training in OCLC as libraries move towards automation. Card catalogs are being converted into online catalogs and cataloging staff need the new skills. Fifty one respondents indicate the availibility of such help. Forty three respondents indicate they provide DOCLINE training which is NLM's automated inter-library loan request and referral system.

Librarians feel very strongly that conferences and workshops are the most effective way of continuing education and professional development, followed by self study and lecture series, respectively. Their comments suggest that "study abroad" or "distance learning" are not usually available nor helpful with addressing trends in the U.S. A lot of professionals obtain professional development through local chapters of the MLA, special libraries, individual computer vendors, reading library literature and through mentors, all of which are very helpful.

In developing countries perhaps the reverse is true, because the opportunities of continuing education do not exist within their countries, so motivated librarians go abroad to acquire them. They are held in high esteem for doing so. Mentoring and self-study of professional literature are extremely useful ways of acquiring knowledge there too. But access to literature is very limited due to restrictions on import and foreign currency limitations. Local literature production is almost nil.

CHAPTER V

DISCUSSION

This exploratory study has a two-dimensional focus; 1) to find what continuing education or in-house training health sciences libraries in the U.S. are offering to their staff; and 2) to determine what kind of programs are available for foreign health sciences librarians from which they can benefit in terms of developing programs in their own countries and in sharing the expertise with their U.S. contemporaries.

The majority of the respondents agree that continuing education and enhancement of skills is very important both for developed and developing countries. In the move towards the 21st century with technological advances, more and more CE programs to maintain an edge in the highly competitive information field are going to be needed.

Social and technological changes have their impact on medical libraries as well, whether attached to hospitals or medical schools or research centers. Budget cuts, new subjects, increasingly sophisticated users and perceptions of personal obsolescence have to be faced. Individual librarians often see their own training grow less relevant causing stress among professionals. The MLA's and NLM's continuing education courses are major focused efforts in bettering medical librarianship in the United States.

The MLA's record in continuing education nationally and internationally is admirable and held in high regard by other associations around the world. The MLA's International Cooperation Committee is assisted by the NLM's Associate Director for International Affairs as a permanent consultant. The MLA's Cunningham Fellowship program is especially for medical librarians from countries where such training is not available, with careful attention to provision of a program that is appropriate for the country to which the candidate returns. Perhaps a closer coordination with the World Health Organization and its regional offices would provide fellowship candidates with what is required to become regionally effective on their return to their own countries.

A health sciences librarian in a developing country often serves physicians or researchers who have received all or part of their training in a developed country and thus expect the refinements of information services found there. It should not be surprising that librarians from developing countries wish to apply at home the new technologies they easily, or not so easily, learn while studying abroad.

Library schools must respond to the challenges and diverse needs of students and new times. The traditional master's degree program is not able to provide the specialized preparation health sciences librarians need for survival in the health information environment that is rapidly bearing down. They may embark on joint or dual

degree programs with their own universities where possible. For example, with the school of business administration, public administration or school of public haalth, students can pair their M.L.S. with an M.P.H., M.B.A. or M.P.A. Dual degrees in a joint degree program will surely stand them in good stead in the job market.

The library educationists with a vision for the future may be able to put in place a few edcational programs that can train effective new health sciences information professionals and encourage international cooperation by retaining and updating education of motivated medical librarians who see a future bright with new technology, a different managerial style and cross professional cooperation. It is the responsibility of individual professionals and institutions to explore such new avenues.

REFERENCES

[1]Janet Doe, "The Development of Education for Medical Librarianship," Bulletin of medical Library Association 37 (July 1949): 213-20

[2]Estelle Brodman, "Education for Medical Librarian in the United States," Libri 3 (1954): 205-13

[3]William D. Postell, "The Medical Librarian," in Handbook of Medical Library Practice, 2nd ed.(Janet Doe, ed.) Chicago : American Library Association, 1956. p.30-41

[4]Barbarie Hill, "The Development of Education for Medical Librarians," Bulletin of Medical Library Association 60 (January 1972): 121-31

[5]Sherrilynne Shirley, "An Annotated Bibliography on Education for Medical Librarianship, 1940-68," Bulletin of Medical Library Association 57 (October 1969): 391-98

[6]Barbara Hill, "The Development of Education for Medical Librarians," Bulletin of Medical Library Association 60 (January 1972): 121-32

[7]Heartsill Young, The ALA Glossary of Library and Information Science (Chicago : ALA, 1983)

[8]Estelle Brodman, "Continuing Education for Medical Librarianship; A Symposium: Internship Training," Bulletin of Medical Library Association 48 (October 1960): 408-12

[9]Lowell Martin, "Work-Study Programs Recruiting Break-Through," Library Journal 82 (November 1,1957): 2743-2749

[10]John F. Harvey; Frances L. Carroll, Internationalizing Library and Information Science Education (New York : Greenwood Press, 1987), pp.123-41

[11]Patrick W.Brennen; Marilyn B. Sullivan, "Work/ Training Programs for International Health Sciences Librarians in American Medical School Libraries," Bulletin of Medical Library Association 77 (April 1989): 170-75

[12]Ellen Gay Detlefsen, "Education for Health Sciences/ Biomedical Librarianship: Past, Present, Future," Bulletin of Medical Library Association 74 (April 1986): 148-53

[13]Mayfield, M.; Kent, "Organizational Change in the Medical Library Association: Evolution of the Continuing Education Program," Bulletin of Medical Library Association 75 (October 1987): 326-32

REFERENCES

[14]Arthur W. Hefner; M.Roy Schwarz, "Medicine and Health Care:Implications for Health Sciences Library Practice," Bulletin of Medical Library Association 74 (April 1986): 142-47

[15]Irene M. Lathrop, "Continuing Education Needs of Hospital Librarians." Bulletin of Medical Library Association 74 (April 1986): 110-14

[16]Dean Schmidt; James Swanton, "Qualifications Sought by Employers of Health Sciences Librarians 1977-78," Bulletin of Medical Library Association 68 (January 1980): 58-63

[17]Sue Stroyan, "Qualifications Sought by Employers of Health Sciences Librarians, 1986," Bulletin of Medical Library Association 73 (July 1987): 209-213

[18]Alan Rees, "Professional Medical Library Education in the United States in Relation to the Qualifications of Medical Library Manpower in Ohio," Bulletin of Medical Library Association 56 (October 1968): 368-79

[19]Harold H. Royaltey, "The Information Needs of Health Care Professionals and Consumers in Developing Countries," Bulletin of Medical Library Association 76 (January 1988): 35-43

[20]Alan Rees, "Preparing for New Library Roles in the Electronic Information Environment," in The Australian and New Zealand Health and Medical Librarians: Proceedings of the Joint Conference Held in Auckland 14 November 1989 (Auckland, New Zealand: University of Auckland, 1989)

[21]Baryl Ruff, "The World Health Organization Library (Geneva) and Health Literature Services Programme," Bulletin of Medical Library Association 76 (January 1988): 58-63

[22]Ursula Poland, "Reflections on the Medical Library Association's International Activities," Bulletion of Medical Library Association 70 (October 1982) 359-68

SELECTED BIBLIOGRAPHY

Brennen, Patrick and Sullivan, Marilyn B. "Work/Training Programs for International Health Sciences Librarians in American Medical School Libraries." Bulletin of Medical Library Association 77 (April 1989): 170-75

Brodman, Estelle. "Continuing Education for Medical Librarianship: A Symposium: Internship Training." Bulletin of Medical Library Association 48 (October 1960): 408-12

--------. "Education for Medical Librarians in the United States." Libri 3 (1954): 205-13

Detlefsen, Ellen Gay. "Education for Health Sciences/Biomedical Librarianship: Past, Present, Future." Bulletin of Medical Library Association 74 (April 1986): 148-53

Doe, Janet. "The Development of Education for Medical Librarianship." Bulletin of Medical Library Association 37 (July 1949): 213-20

Fraser, M. "The Medical Library Association: The Span of Its International Activities: A Chronology." Bulletin of Medical Library Association 59 (July 1971): 495-510

Harrison, K.C. International Librarianship (New Jersey : Scarecrow Press, 1989) 212p.

Harvey, John F. and Frances L. Carroll. Internationalizing Library and Information Science Education (New York : Greenwood Press, 1987) pp.123-41

Hayes, R.M. "Manpower Issues: Implications for Training and Retaining of Librarians." Bulletin of Medical Library Association 71 (October 1983): 427-32

Hefner, Arthur W. and Schwarz, Roy. "Medical and Health Care: Implications for Health Sciences Library Practice." Bulletin of Medical Library Association 74 (April 1986) 142-47

Hill, Barbara. "The Development of Education for Medical Librarians." Bulletin of Medical Library Association 60 (January 1972): 121-32

Horne, E.E. "International Comparison and Problems in the Application of Information Technology." Reference Librarian 17 (Spring 1987): 30-32

Lathrop, Irene M. "Continuing Education Needs of Hospital Librarians." Bulletin of Medical Library Association 74 (April 1986): 110-14

Lee, H.W. "International Library Internships: an Effective Approach to Cooperation." International Library Review 17 (January 1985): 17-25

McClure, L.W. "The Promise of Fruit...and Light." Bulletin of Medical Library Association 73 (October 1985): 319-29

Marco, G.A. "A Rationale for International Library Education." International Library Review 9 (1977): 355-62

Martin, Lowell. " Work-Study Programs Recruiting Break-Through." Library Journal 82 (November 1, 1957): 2743-2749

Mayfield, M. and Kent. "Organizational Change in the Medical Library Association: Evolution of the Continuing Education Program." Bulletin of Medical Library Association 75 (October 1987): 326-32

Neal, J.G. "Continuing Education: Attitudes and Experiences of the Academic Librarians." College and Research Libraries 41 (March 1980): 128-33

Poland, Ursula. "The Medical Library Association's International Fellowship Programs." Bulletin of Medical Library Association 66 (October 1978): 447-53

--------."Reflections on the Medical Library Association's International Activities." Bulletin of Medical Library Association 70 (October 1982): 359-68

Postell, William D. "The Medical Librarians." in Handbook of Medical Library Practice. 2nd ed. (Janet Doe, ed.) Chicago : ALA, 1956. pp.30-41

Rees, Alan. "Preparing for New Library Roles in the Electronic Information Environment." in The Australian and New Zealand Health and Medical Librarian: Proceedings of the Joint Conference Held in Auckland 14 November 1989 (Aukland, New Zealand : University of Auckland, 1989)

--------. "Professional Medical Library Education in the United States in Relation to the Qualifications of Medical Library Manpower in Ohio." Bulletin of Medical Library Association 54 (October 1968): 368-79

Royalty, Harold H. "The Information Needs of Health Care Professionals and Consumers in Developing Countries." Bulletin of Medical Library Association 76 (January 1988): 35-43

Ruff, Baryl. "The World Health Organization Library (Geneva) and Health Literature Services Program." Bulletin of Medical Library Association 76 (January 1988): 58-63

Schmidt, Dean and Swanton, James. "Qualifications Sought by Employers of Health Sciences Librarians 1977-78." Bulletin of Medical Library Association 68 (January 1980): 58-63

Stroyan, Sue. "Qualifications Sought by Employers of Health Sciences Librarians 1986." Bulletin of Medical Library Association 75 (July 1987): 209-13

Young, Hartsill. The ALA Glossary of Library and Information Science (Chicago : ALA, 1983) 204p.

APPENDIX A

Questionnaire

SURVEY OF CONTINUING EDUCATION AND IN-SERVICE TRAINING OF HEALTH SCIENCES LIBRARIANS

Please check as appropriate and complete as many questions as possible. Replies will be held in strict confidence, although facts and figures may be quoted without institutional attribution.

Name of School.....

Name of Respondent.....

Position of Respondent.....

Total Number of Clients

Student.....
Faculty.....
Others.....

1. What educational background did you have when you started work in the medical library?
   -- MLS (with formal medical librarianship courses)
   -- MLS (without above courses)

2. What subjects did you study at the undergraduate level? name the two major ones.

   a. b.

3. What section of your library are you responsible for? (check one that applies)
   --Director (Administrative Head)
   --Reference Head
   --Technical Services Head
   --Circulation Head
   --Periodical Section Head
   --Other

4. Which areas of your job were most difficult? Describe.

5. Were these difficulties mentioned in 4 due to deficiencies in formal education courses?

   --yes --no

6. How did you acquire skills to overcome those deficiencies: (check as many as apply
   --on the job training
   --further formal education
   --MLA continuing education programs
   --NLM training programs

7. Does your libray provide any orientation program to new staff members?
   --yes
   --no

8. Is there any work/training program available for foreign librarians in your library?
   --yes
   --no

9. Who provides that training to them? (check as many as apply)
   --library personnel
   --self instructional material
   --workshops conducted by invited experts
   --hands-on practice by staff members

10. What areas of work training are provided in: (check as many as apply)
   --Medline searching
   --Docline (automated ILL system of NLM)
   --OCLC training
   --Medical Subject Headings
   --Others, specify.

11. In your opinion the most effective in-service training of staff is: (rank in order of importance from 1-6)

   --Self study through media packages (TV, Diskettes, slide/tapes etc.)
   --Lecture series
   --Workshops/conferences
   --Tours of other libraries
   --Study-abroad programs
   --Distance learning (correspondence coures, teleconferencing,satellite transmissions of audio and video contents)

12. What questions or comments do you have regarding the topic of this questionnaire?

APPENDIX B

Cover Letter

October 10, 1990

RE: Continuing Education and In-service Training of
Health Sciences Librarians Survey

Dear Library Director,

I am a graduate student at the School of Library Science at Kent State University, conducting a national survey of health sciences library professionals in partial fulfillment of my masters degree program. I am trying to ascertain how health sciences librarians in the U.S. further their professional development and, particularly, how they update their knowledge and skills in the institutions with which they are affiliated.

The information gathered will be used in the development of a model for the benefit of a developing country such as Pakistan where specialized education for health sciences librarians has not begun although needs exist at the grass roots level.

While much has been written on the development of formal education for medical librarianship, there is little available data related to staff development and continuing education opportunities applicable to the third world countries.

I'm requesting your help in this survey. Would you kindly refer the enclosed questionnaire to three professional librarians on your staff that would be in the best positions to provide this information by October 25, 1990. I have enclosed a self-addressed stamped envelope for your convenience.

A copy of the final results of my study will be available upon request.

Thank you for your help and cooperation.

Sincerely,

AZRA QURESHI
Principal Investigator
Kent State University
School of Library Science
Kent, OHIO 44242